

Monoclonal anti-human AIFM1 antibody (clone AT22E9)

Mouse IgG_{2a}, κ

Cat. No. ATGA0411

Immunogen: Recombinant human AIFM1 (98-609aa) purified from *E. coli*

NCBI Accession No.: NP_665811

Isotype: Mouse IgG_{2a} heavy chain and κ light chain

Clone: Anti-human AIFM1 mAb, clone AT22E9, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human AIFM1 protein.

Description: Apoptosis-inducing factor 1, also known as AIFM1, is a mitochondrial protein that translocates to the nucleus upon induction of apoptosis. AIFM1 has been shown to cause DNA fragmentation and chromatin condensation and to induce the release of cytochrome c and caspase-9 from mitochondria. Bcl-2 overexpression has been shown to prevent the release of AIFM1 from mitochondria, but not to block its apoptogenic activity. Mutations in this gene cause combined oxidative phosphorylation deficiency 6, which results in a severe mitochondrial encephalomyopathy.

Concentration: 1mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

Storage: Can be stored at +4°C. For long term storage, aliquot and store at -20°C. Avoid repeated freezing and thawing cycles.

Usage: The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Application: ELISA, WB, Flow cytometry, ICC/IF

Warning

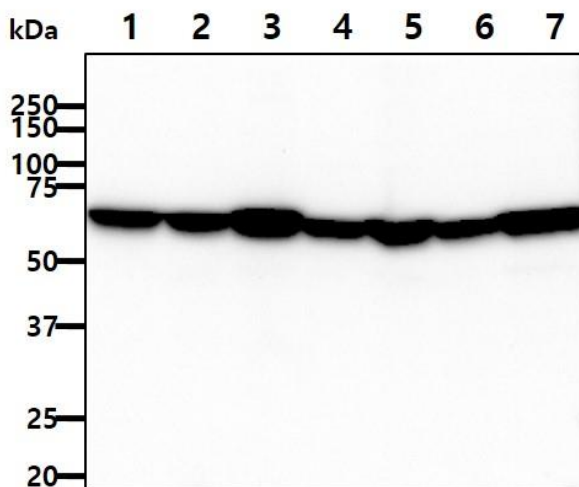
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Western blot analysis

The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human AIFM1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

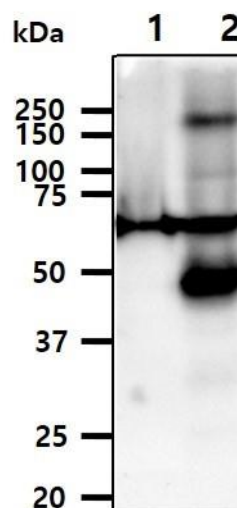
- Lane 1. : Jurkat cell lysate
- Lane 2. : HeLa cell lysate
- Lane 3. : Hep3B cell lysate
- Lane 4. : Raji cell lysate
- Lane 5. : K562 cell lysate
- Lane 6. : MCF7 cell lysate
- Lane 7. : CTLL2 cell lysate



Western blot analysis

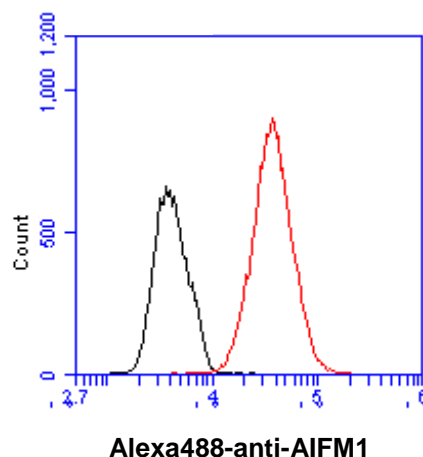
The tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human AIFM1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

- Lane 1. : Mouse heart tissue lysate
- Lane 2. : Mouse liver tissue lysate



Flow cytometry

Flow cytometry analysis of AIFM1 in Hep3B cell line, staining at 2-5ug for 1x10⁶cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

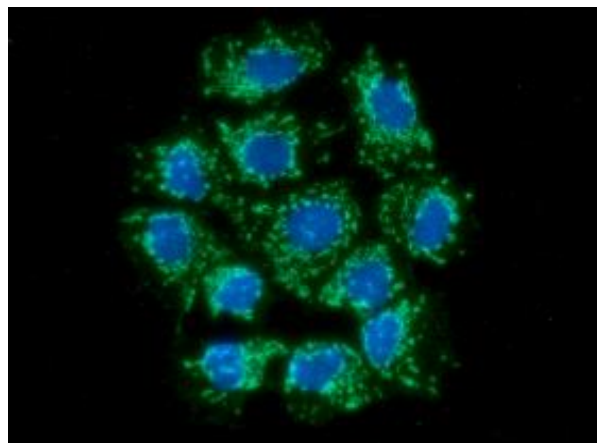


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ICC/IF analysis

ICC/IF analysis of AIFM1 in Hep3B cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human AIFM1 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



General references: Tang Y., *et al.* (2013) *J Proteomics*. **91C**: 200-209.
Kim TW., *et al.* (2013) *Cell Death Dis.* **4**: e919.